We claim:

1. An artificial intervertebral implant for replacing at least a portion of an intervertebral disc, comprising:

two endplates separated from each other, the two endplates each having an outward facing surface that faces away from each other so that a height of the implant is defined by a separating distance between each of the outward facing surfaces;

a central adjuster between the two endplates and configured to adjust the height of the implant by changing the separating distance between the outward facing surfaces of the two endplates, the central adjuster having at least one articulating surface configured to articulate between the adjuster and at least one of the two endplates.

2. The artificial intervertebral implant of claim 1, wherein the central adjuster is threadingly engaged with a further of the two endplates so that rotating the central adjuster in relation to the further of the two endplates causes a change in the separating distance between the endplates.

3. The artificial intervertebral implant of claim 2, wherein the central adjuster has two flat surfaces between which a matingly engaging tool may be inserted for rotating the central adjuster in relation to the further of the two endplates.

4. The artificial intervertebral implant of claim 2, wherein the central adjuster has at least one cavity into which an engaging tool may be inserted for rotating the central adjuster in relation to the further of the two endplates.

5. The artificial intervertebral implant of claim 4, wherein an inner surface of the cavity is threaded so that the engaging tool may be matingly threaded into the cavity.

6. The artificial intervertebral implant of claim 4, wherein the cavity is configured to be an aperture that penetrates through the central adjuster.

7. The artificial intervertebral implant of claim 1, further comprising a lock which is configured and arranged to prevent adjustment of the separating distance between the two outward facing surfaces of the two endplates once the lock is engaged.

8. The artificial intervertebral implant of claim 7, wherein the lock is a jam-nut which is threadingly engaged with the central adjuster, the jam-nut being capable of being frictionally engaged with a surface of one of the two endplates.

9. The artificial intervertebral implant of claim 7, wherein the lock includes an elongated bar that penetrates through one of the two endplates, the bar having a tip configured to frictionally engage a surface of the central adjuster.

10. The artificial intervertebral implant of claim 7, wherein the lock includes an elongated bar having a tip configured to matingly engage into a complementary cavity.

11. The artificial intervertebral implant of claim 10, wherein the central adjuster has a series of complementary cavities, each configured to accommodate receipt of the tip of the bar separately, the cavities being arranged in such a manner that only a limited number of adjustments in the height of the implant are attained corresponding to the series.

12. The artificial intervertebral implant of claim 10, wherein the cavity and the tip of the bar each configured to matingly fit into each other.

13. The artificial intervertebral implant of claim 10, wherein the complementary cavity and the lock being in different ones of the two endplates and the central adjuster.

14. The artificial intervertebral implant of claim 13, wherein the central adjuster and the two endplates have threads that engage endplate in one direction to expand the separating distance between the outward facing surfaces of the two endplates, the lock and the complementary cavity having threads that engage each other in a direction opposite to the one direction to prevent the adjustment.

15. The artificial intervertebral implant of claim 1, wherein the articulating surface is configured to allow articulations in a manner that selected from a group consisting of axial rotation, flexion, extension, lateral bending, translation, and any combination thereof.

16. The artificial intervertebral implant of claim 15, wherein at least a portion of the articulating surface is in a shape selected from a group consisting of concave, convex, and a mixture of concave and convex.

17. The artificial intervertebral implant of claim 1, further comprising a positive stop configured and arranged to limit an extent of articulation that the articulating surface may articulate.

18. The artificial intervertebral implant of claim 17, wherein the positive stop is an integral part of one of the endplates.

19. The artificial intervertebral implant of claim 17, wherein the positive stop is a separate structure attached to one of the endplates.

20. The artificial intervertebral implant of claim 17, wherein the positive stop is arranged in such a manner to allow articulation in different direction by different extents.

21. The artificial intervertebral implant of claim 1, wherein the central element further comprises a further articulating surface that articulates with a corresponding surface of a further of the two endplates.

22. The artificial intervertebral implant of claim 21, wherein the central adjuster is comprised of at least two components, one comprising the articulating surface and the other comprising the further articulating surface, with the two components being so configured that the relative position of the two components can be adjusted to change the separating distance between the outward facing surfaces of the two endplates.

23. The artificial intervertebral implant of claim 22, wherein the components of the central adjuster are both threadingly engage by a retaining ring.

24. The artificial intervertebral implant of claim 23, wherein threading between the retaining ring and one component in one of a clockwise and counterclockwise direction and threading between the retaining ring and the further of the at least two endplates being in the other of the clockwise and counterclockwise directions.

25. The artificial intervertebral implant of claim 1, wherein the outward facing surfaces are roughened.

26. The artificial intervertebral implant of claim 1, wherein at least one of the two endplates have at least one protrusion that extends outwardly beyond the outward facing surface associated with the at least one of the two endplates.

27. The artificial intervertebral implant of claim 1, wherein a portion of the central adjuster is configured so that it is geometrically shaped to be snap-fitted into a corresponding cavity in one of the two endplates.

28. The artificial intervertebral implant of claim 27, wherein the endplate comprises at least one slot configured to widen in response to deformation imposed on the endplate to snap-fit with the central adjuster.

29. The artificial intervertebral implant of claim 27, further comprising a capture ring configured and arranged to confine the central adjuster inside of the corresponding cavity.

30. The artificial intervertebral implant of claim 1, wherein a portion of one of the two endplates is configured so that it is geometrically shaped to be snap-fitted into a corresponding cavity in the central adjuster.

31. The artificial intervertebral implant of claim 29, wherein the central adjuster comprises at least one slot configured to widen in response to deformation imposed on the central adjuster to snap-fit with the endplate.

32. The artificial intervertebral implant of claim 27, further comprising a capture ring configured and arranged to confine the endplate inside of the corresponding cavity.

33. The artificial intervertebral implant of claim 1, wherein the endplate further comprises a cavity inwardly from the outward facing surface.

34. The artificial intervertebral implant of claim 33, wherein the cavity extends through the endplate.

35. The artificial intervertebral implant of claim 33, wherein the endplate further comprises a channel that extends between an outer surface of the endplate to the cavity so as to be in fluid communication with the cavity to enable a fusion promoting material to be introduced into the cavity from the channel.

36. The artificial intervertebral implant of claim 35, wherein a structure is configured and arranged within the channel to prevent the fusion promoting material from backing out of the channel.

37. The artificial intervertebral implant of claim 35, wherein the channel is at least partially closed by a separate component.